

## **REMARKS**

Claims 1-30 are pending in the application.

Claims 7-30 are allowed.

Claims 1-6 stand rejected as being unpatentable over Hu (U.S. Patent No. 5,763,923). Applicant respectfully requests reconsideration of such rejections.

Referring initially to claim 1, such recites a non-magnetic physical vapor deposition target consisting essentially of cobalt, silicon and one phase. Claim 1 stands rejected over Hu's teaching of a target comprising  $\text{CaSi}_x\text{O}_y$ , where X can be in a range of from about 1.4 to about 2.2 and Y can be in a range of from about 0.010 to about 0.100.

Claim 1 is allowable over Hu for at least the reason that Hu does not disclose or suggest that the targets described therein consist essentially of cobalt, silicon and a single phase. Rather, the targets described in Hu comprise a significant percentage of oxygen in addition to the cobalt and silicon, with the oxygen being sufficient to double the bulk resistivity of Hu's materials relative to  $\text{CoSi}_2$  (see, for example, col. 4, lines 20-40). Hu's target does not consist essentially of cobalt and silicon for at least the reason that the oxygen concentration is sufficient to substantially alter the properties of Hu's material, and thus materially affects basic characteristics of Applicant's claimed invention. The Examiner is respectfully referred to M.P.E.P § 2111.03, wherein it is explained that the transitional phrase "consisting essentially of" limits the scope of a claim to a specified material, and other materials that do not "materially affect the basic and novel characteristics" of the claimed invention. In the present case, the phrase "consisting essentially of" excludes materials from claim 1 that would materially alter the recited non-magnetic physical vapor

deposition target containing cobalt, silicon and one phase. The oxygen incorporated into the target constructions of Hu (the  $\text{CoSi}_x\text{O}_y$  constructions) materially alters the compositions of Hu relative to those recited in claim 1 for at least the reason that the oxygen substantially changes a physical property of Hu's target material relative to a material lacking oxygen, as evidenced by Hu's disclosure that the oxygen increases bulk resistivity of the materials exposed therein by at least a factor of 2 relative to materials comprising  $\text{CoSi}_2$ . For at least this reason, claim 1 is allowable over Hu, and Applicant therefore requests formal allowance of claim 1 in the Examiner's next action.

Claims 2 and 3 depend from claim 1, and are therefore allowable for at least the reasons discussed above regarding claim 1, as well as for their own recited features which are neither shown nor suggested by Hu. For instance, claim 2 recites a physical vapor deposition target consisting of cobalt, silicon and one phase. As Hu's targets comprise oxygen in addition to cobalt and silicon, it is inconceivable that such targets could suggest the claim 2 recited target consisting of cobalt, silicon and one phase.


Referring next to claim 4, such recites a physical vapor deposition target consisting essentially of nickel, silicon and one phase. The Examiner contends that Hu teaches a physical vapor deposition target consisting essentially of nickel and silicon. Applicant respectfully submits that Hu contains no teaching of a physical vapor deposition target comprising nickel, and further does not even refer to nickel. As Hu does not refer to nickel, it is inconceivable that Hu could disclose or suggest the claim 4 recited target consisting essentially of nickel, silicon and one phase. For at least this reason, claim 4 is allowable over Hu, and Applicant therefore requests formal allowance of claim 4 in the Examiner's

next Action. Claims 5 and 6 depend from claim 4, and are therefore allowable for at least the reasons discussed above regarding claim 4.

Claims 1-6 are believed allowable for the reasons discussed above, and claims 7-30 are allowed. Applicant therefore respectfully requests formal allowance of claims 1-30 in the Examiner's next Action.

Respectfully submitted,

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